



File 1570-1
Code:
Route
To:

Date: MAY 23 2012

Subject: Reviewing Officer Recommendation, South Unit Oil and Gas Development Project, #12-04-00-0085-A215

To: Appeal Deciding Officer

This is my recommendation on disposition of the appeal filed by Kevin Mueller, on behalf of Utah Environmental Congress and Southern Utah Wilderness Alliance, protesting the South Unit Oil and Gas Project Record of Decision (ROD) signed by Marie-Louise Smith, Acting Forest Supervisor on the Ashley National Forest.

My review was conducted pursuant to, and in accordance with, 36 CFR 215.19 to ensure the analysis and decision is in compliance with applicable laws, regulations, policy, and orders. The appeal record, including the appellant's objections and recommended changes, has been thoroughly reviewed. Although I may not have listed each specific issue, I have considered all the issues raised in the appeal and believe they are adequately addressed in the enclosed document.

RECOMMENDATION

I have reviewed the record and have found that the analysis and decision adequately address the issues raised by the appellant. I recommend the Forest Supervisor's decision be affirmed and the appellant's requested relief be denied.

Stephanie Phillips
Appeal Reviewing Officer





United States
Department of
Agriculture

Forest
Service

Intermountain Region

324 25th Street
Ogden, UT 84401
801-625-5605

File Code: 1570

Date: MAY 23 2012

Kevin Mueller
Utah Environmental Congress
1817 South Main, Suite 10
Salt Lake City, UT 84115

CERTIFIED MAIL – RETURN
RECEIPT REQUESTED

Dear Mr. Mueller:

This is my decision on the appeal you filed on behalf of Utah Environmental Congress, and Southern Utah Wilderness Alliance, regarding the South Unit Oil and Gas Development Project Record of Decision signed by Marie-Louise Smith, Acting Forest Supervisor of the Ashley National Forest.

My review of your appeal was conducted pursuant to, and in accordance with, 36 CFR 215.18. My review focused on the project documentation and the issues raised in your appeal. I specifically incorporate in this decision the project record, the references and citations in the project record transmittal documentation, as well as the Appeal Reviewing Officer (ARO) analysis and recommendation.

After considering your issues and the project documentation, the ARO recommends the Forest Supervisor decision be affirmed. A copy of the recommendation is enclosed.

Based upon a review of the project documentation provided, I find the issues were adequately considered. I agree with the ARO analysis and conclusions in regard to your appeal issues. I find the Forest Supervisor made a reasoned decision and has complied with all laws, regulations, and policy. After careful consideration of the above factors, I affirm the Forest Supervisor's decision to implement the South Unit Oil and Gas Project. Your requested relief is denied.

My decision constitutes the final administrative determination of the Department of Agriculture [36 CFR 215.18(c)].

Sincerely,

MARLENE FINLEY
Appeal Deciding Officer



cc: John R Erickson, Marie-Louise Smith



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Stephanie Phillips
Appeal Reviewing Officer



Appeal Responses
Appeal #12-04-00-0085-A215
Utah Environmental Congress and Southern Utah Wilderness Alliance

South Unit Oil & Gas Development FEIS/ROD
Duchesne Ranger District, Ashley National Forest
Duchesne County, Utah

Appeal Issue 1. (page 5 of appeal)

The Issue: The appellant claims that the FEIS shows significant and almost continuous violations of the water quality standards for TDS, selenium and boron in the Pariette Draw, Antelope Creek and Duchesne River watersheds. FEIS at 114 -115. The appellant claims that the decision adopted by the ROD does not ensure that oil and gas development on the Forest will comply with water quality standards or specifically, the TMDLs designed to bring these waters into compliance with state standards.

The Rule & the Analysis: The Utah Water Quality Act (Rule R317-2) has requirements regarding designated uses, water quality standards, and the anti-degradation policy. These requirements for Category 1 waters (which includes all streams within National Forest boundaries) prohibit activities that degrade water quality, prohibit new point source discharges, and require implementation of BMPs and regulatory programs. Where current water quality is below state water quality standards, TMDLs are developed to identify pollutant reduction needs. Completed TMDLs exist for the Duchesne River and Pariette Draw. EPA made comments during project development of this project regarding water quality issues, and the two approved TMDLs exist for receiving waters downstream from the project area. These comments and direction emphasize minimizing direct disturbance within riparian corridors, and prevention of surface runoff generation from roads and disturbed areas (well pads) for oil and gas activities.

The proposed activity includes mitigation and operational requirements for water quality related issues. All produced water will be either recycled or treated and there will be no surface discharge of produced water. Other water quality issues are related primarily to construction and use of roads and well pads and the potential for surface runoff and sediment delivery from those disturbances. Mitigation and operational requirements for road and well pad construction are detailed in the ROD (page 27-29). The soil/water/geology specialist report describes expected effects from road and well pad construction and use (pages 37-39), and provides estimates of effects based on comparison to water quality of similar development in the Pariette drainage, immediately to the east. Naturally saline soils and irrigation practices are identified in the Duchesne River and Pariette Draw TMDLs (page 79 and 44, respectively) as primary causes of high TDS and Utah DEQ recommends site specific TDS criteria for the Antelope Creek drainage. The FEIS also includes analysis (last paragraph page 120) regarding the scale of expected effects. While some effects from roads and well pads could occur at the local scale (wash or hill slope), no effects at a watershed scale are anticipated.

The Conclusion: In this case the ANF used reasonable rationale and information to make the determination that the proposed project, with its required mitigation, would not contribute to

degradation of water quality. The forest used appropriate indicators and methods to estimate the anticipated effects of the project to surface and ground water.

Appeal Issue 2: Appeal Point deleted in final Appeal Transmittal Letter submitted by the Ashley National Forest.

Appeal Issue 3. (page _6_ of appeal)

The Issue: The appellant claims that the ROD does not guarantee, as it must, that the existing high water quality in all Forest waters will be maintained. The appellant claims that this is particularly true because relative to Category 1 Waters, which includes all surface waters in the Ashley, Utah Law mandates practices to minimize pollution effects.

The Rule & Analysis: The Utah Water Quality Act includes requirements for Category 1 waters. Rule R317-2 addresses requirements for maintaining water quality. When a category 1 stream is impaired and has water quality below established standards, the rule has requirements to establish BMPs to address nonpoint sources of pollution.

The ROD requires BMP which specifically address processes that affect surface runoff (pages 22-32). These include surface runoff generation (cut slope requirements, erosion control on roads and well pads, vegetative recovery on disturbed surfaces), and surface runoff delivery to channels (buffer widths, road drainage and maintenance). These mitigations comply with TMDL recommended control actions (pg. 133-144 of Duchesne River TMDL) and EPA and Utah DWQ recommendations (FEIS, pg. E88-E100) for the project.

The Conclusion: The analysis identifies appropriate and relevant levels of mitigation specific to runoff processes that have the potential to affect water quality. Also see response to appeal issue 1.

Appeal Issue 4. (page _6_ of appeal)

The Issue: The Forest Service admits that impacts from the proposed action will adversely impact already impaired waters and will continue to do so after construction is complete.

The Rule, Analysis, & Conclusion: See response to appeal issue 1 and 3.

Appeal Issue 5. (page _7_ of appeal)

The Issue: The appellant claims that there is no evidence in the record that the surface disturbances, stream crossings, road building and other development activities will not contribute to what is already a violation of state water quality standards.

The Rule & the Analysis: Under Utah regulations for Category 1 waters and the anti-degradation rule (Rule 317-2-3), the state conducts anti-degradation reviews for projects

requiring regulatory permitting (Clean Water Act Sections 401 (FERC and other Federal actions), 402 (UPDES permits), and 404 (Army Corps of Engineers permits).

The proposed action includes numerous mitigations and operation requirements regarding protection of surface water quality, soil erosion, sediment delivery, and riparian habitat (see response to Appeal issue 1 and 3). In addition, any specific action that would require permitting (as described above) would require the state to conduct an anti-degradation review (317-2-3.5), in addition to the normal level of analysis in processing the respective permits. Also included in the analysis is reference to studies and reports that identify sources other than oil and gas road and pad development as the primary source of the pollutants in the areas impaired streams.

Conclusion: The water quality mitigation required in the ROD in addition to specific requirements for anti-degradation compliance for the project as a whole and anti-degradation review for any activity that would involve a stream channel are well documented in the record.

Appeal Issue 6. (page _7_ of appeal)

The Issue: The appellant claims that the Forest Service has in no way ensured that the project will comply with the TMDL limits or that it will not exacerbate the failure to achieve those limits.

The Rule, Analysis, & Conclusion: See response to appeal issue 1 and 3.

Appeal Issue 7. (page _7-8_ of appeal)

The Issue: The appellant attests that the Forest Service's failure to show that the project will not cause or contribute to a violation of state water quality standards and will comply with the relevant TMDLs is a particularly problematic because the surface disturbance and bank instability that will occur as a result of the project are exactly those types of conditions that will further degrade water quality.

The Rule, Analysis, & Conclusion: See response to appeal issue 1.

Appeal Issue 8. (page _7_ of appeal)

The Issue: The appellant states that the agency cannot provide guarantee that the project will not violate state water quality standards because the planned project will make water quality worse and that the existing development in the area is already causing or contributing to a violation of state water quality standards.

The Rule, Analysis, & Conclusion: See response to appeal issue 1.

Appeal Issue 9. (page _7 & 8_ of appeal)

The Issue: The appellant claims that currently applied "best management practices" have failed to protect these waters and asserts that these practices, along with 404 and storm water permit

requirements have not prevented and will not avoid violations in the future. Thus the appellant asserts that the Forest Service has failed to establish that the proposed project will not cause or contribute to ongoing violations of state water quality standards and at the same time the agency has failed to bring the affected waters into compliance with state standards.

The Rule & Analysis: BMPs recommended as mitigation and operational requirements for the project come from a variety of sources. The Duchesne River TMDL (pages 128-145) references and incorporates BMPs from the NRCS National Conservation Practice Standards handbook. Other BMPs specific to oil and gas development projects were incorporated from the BLM Gold Book.

Specific BMPs required for this project include excluding use from riparian areas, requiring the minimum number of stream crossings (perpendicular to channel and well-designed when required), minimum necessary disturbance levels at well pads, erosion control of roads fill and cut banks and well pads, no occupancy etc. Numerous BMPs were recommended by cooperating agencies and from project comments. The impaired streams in the area listed for pollutants that are shown in the project record to be primarily from other sources, so failure “to protect these waters” the result of other issues.

Conclusion: The type and number of recommended mitigation and BMPs include established practices and are reasonable and appropriate for the potential issues expected from this project.

Appeal Issue 10. (page _8_ of appeal)

The Issue: The appellant claims that the Forest Service refuses to acknowledge the significant protections afforded to all waters within Forest boundaries, much less analyze the impacts of oil and gas development on these waters in light of the legal mandate that the “existing high quality” of these Category 1 Waters must be maintained.

The Rule & Analysis: Utah Administrative Code Rule 317-2 defines and governs management of Category 1 streams within the state. The rule states that Category 1 streams must “be maintained at existing high quality” and “Other diffuse sources (nonpoint sources) of wastes shall be controlled to the extent feasible through implementation of best management practices or regulatory programs”. Where water quality impairment occurs, TMDL analysis determines a load reduction and provides guidance to improve water quality and implementation of BMPs to control nonpoint sources of pollution is required.

Category 1 waters are required to “be maintained at existing high quality” or to have “implementation of best management practices or regulatory programs” to address water quality problems, as is the case with the streams in the project area. The Duchesne River TMDL includes recommended BMPs to address water quality issues. The TMDL also recommends a site specific standard for TDS based on Utah DEQs findings that TDS levels are naturally high due to bedrock geology. Further more, a discussion concerning the cause of stream impairment in the project area occurs in the FEIS (page 115) and in the Pariette Draw TMDL (page 68). Oil and gas activities are not identified as a contributor of sediment or runoff to stream channels due to implemented BMPs (TMDL page 68, first paragraph). The project record further discusses

results of a USGS and Bureau of Reclamation study that analyzed total dissolved solids in the Upper Colorado River Basin (FEIS page 116). The results indicate that bedrock geology, climate characteristics, and irrigated agriculture are the largest factors influencing total dissolved solids in surface waters. The effects of oil and gas development are analyzed in the FEIS (3.6.2, starting on page 119) and includes analysis of the relationship between oil and gas development and water quality in a comparable adjacent basin (FEIS page 120).

The Conclusion: The analysis used appropriate models and level of analysis to determine that the expected effects of the project would not degrade water quality in the listed stream segments, thereby in compliance with the anti-degradation rule.

Appeal Issue 11. (page _8_ of appeal)

The Issue: The appellant asserts that the agency's oversight, particularly in light of the relevant public comment, indicates a failure to take a hard look at the environmental consequences of its proposed action and a failure to ensure compliance with Utah water quality standards.

The Rule, Analysis, & Conclusion: See response to appeal issue 10.

Appeal Issue 12. (page _9_ of appeal)

The Issue: The appellant claims the proposed project, both individually and cumulatively, will violate Utah's anti-degradation rule.

Rule: The state of Utah anti-degradation policy does not include requirements for buffers or any exclusion of use within a certain distance of a channel. In channel work is regulated by the Clean Water Act and the Utah Stream Alteration rule (Rule R655-13). No laws or regulations exist that apply to channels above the high water mark. The anti-degradation rule requires that water quality be maintained but leaves a large amount of discretion as to activities that can occur near stream channels, as long as the threshold of not causing water quality degradation is met.

Analysis: The ROD includes operational requirements that no occupancy occur within 50' of intermittent or ephemeral streams. The channel buffer widths were adopted from the Inland Native Fish Strategy which recommends riparian habitat conservation areas (RHCAs) for different categories of streams for areas where site specific RHCAs do not yet exist. The recommended width in the FEIS follows the INFISH recommendation.

The Conclusion: The analysis for the 50' width is based on reasonable science and includes rationale for why water quality is not expected to be degraded from project effects.

Appeal Issue 13. (page _8_ of appeal)

The appellant claims that the Forest Service's decision is unlawful, contrary to its duties under the Clean Water Act and otherwise arbitrary and capricious.

The Rule, Analysis, & Conclusion: See response to appeal issue 1.

Appeal Issue 14. (page _8_ of appeal)

The Issue: The appellant claims that the agency has failed to show that the project will conform to existing plans designed to bring the affected waters into compliance with state standards.

The Rule, Analysis, & Conclusion: See response to appeal issue 1 and 9.

Appeal Issue 15. (page _9_ of appeal)

The Issue: The appellant claims that there is nothing in the record to support the agency's decision to provide only minimal protection for intermittent and ephemeral streams, despite the Utah regulation that affords these streams the same protection as perennial streams.

The Rule, Analysis, & Conclusion: See response to appeal issue 12.

Appeal Issue 16. (Page 14 of appeal)

The Issue: The appellant claims that the Forest ran afoul of the Western Uinta Basin Oil and Gas ROD by concluding that proposed project, together with other oil and gas activity on the Forest will adversely impact water quality and will, indeed, continue to cause violations of water quality standards.

The Rule: In Executive Order No. 11990, Protection of Wetlands, Section 1. "(a) Each agency shall provide leadership and shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; and (2) providing Federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities."

The Western Uinta Basin Oil and Gas ROD has a No Surface Occupancy to comply with Executive Order No. 11990 in wetlands > 40 acres. The ROD also has note that 36 CFR 228.108 (j) provides for protection of areas < 40 acres.

36 CFR 228.108 (j) Watershed protection states " Except as otherwise provided in the approved surface use plan of operations, the operator shall not conduct operations in areas subject to mass soil movement, riparian areas and wetlands." This does not provide for exclusion, but with managed plan to accomplish the task.

The Analysis: These laws do not specify complete protection to the point of prohibition of an action. The "agency shall take action to minimize..." Western Uinta Basin Oil and Gas ROD allows for an action with an approved surface use plan of operations. The FEIS and ROD allows for a 50 foot buffer along the intermittent and ephemeral drainages.

The Conclusion: With Regard to the appellant's challenge, the Forest Service is in compliance with Executive Order No. 11990 and Western Uinta Basin Oil and Gas ROD. The Forest Service has provided for a surface use plan for mitigation of the intermittent and ephemeral drainages based on information provided in the FEIS. The FEIS Volume 1 documents in 3.7.2.6 Mitigation on page 129 a minimum of 50 feet buffer in the intermittent and ephemeral drainages.

Appeal Issue 17. (page _10_ of appeal)

The Issue: The appellant asserts that the Forest Service fails to recognize that the 404 program covers only waters of the United States, so that means that ephemeral streams and wetlands would not be subject to 404 permitting.

Rule: Section 404 of the Clean Water Act requires a permit for any work within the high water mark of waters of the United States.

Analysis: Section 404 does not have jurisdiction over ephemeral channels and does not require permits for work on them so the appellant is correct in stating that ephemeral channels would not be subject to 404 permitting. Wetlands are under the jurisdiction of section 404 and are always subject to 404 permitting. However, an ephemeral channel flows only in direct response to rainfall or snowmelt, does not receive contribution from groundwater, and is above the water table at all times. By definition, that precludes wetland habitat, meaning there is less value to protect at those sites. Even so, mitigation includes a 50' buffer along ephemeral channels, providing more stringent standards regarding ephemeral channels than state or federal regulatory agency direction.

Conclusion: The Forest Service recognizes the jurisdiction of Section 404 and the relative value of ephemeral channels and applied appropriate mitigation for the value of the resource.

Appeal Issue 18. (page _10_ of appeal)

The Issue: The appellant asserts that the reliance by the Forest Service, on securing 404 and Utah storm water permits will have no significant impacts on waters or riparian and wetland habitats is highly misplaced. The appellant states that the Forest Service is incorrect to suggest that Utah storm water permitting would ensure compliance with state water quality standards and that actually Utah regulation specifically exempts sedimentation from oil and gas development from its storm water permitting program. The appellant also highlights the contradiction by the Forest Service in their reasoning and conflicts in the record which the record acknowledges that despite any alleged storm water permits, existing projects, the proposed project and other proposed oil and gas projects will further degrade water quality on the Forest and downstream.

Rule: The Pariette Draw TMDL (page 68) and the FEIS (page 115-116) provide discussion about the cause of water quality impairment in the project area, which primarily includes bedrock geology, climate, and agricultural activities. Activities permitted through the federal and state permitting process are not identified as sources of impairment. Section 404 of the Clean Water Act and the Utah Stream Alteration Rule (R655-13) are administered by the US Army Corps of Engineers and the Utah Division of Water Rights, respectively. They have the

ability to suggest, include, or require alternative methods or additional mitigation when site specific concerns exist or when they deem it necessary to protect water quality. Permits are generally granted with well defined mitigation designed to minimize negative effects to water quality.

Analysis: The proposed action includes mitigation that excludes stream channels from all activities except a minimum number of road crossings where absolutely necessary. These crossings would require permitting from either the state of Utah or the federal government and would undergo an additional, site specific level of analysis for each crossing. Each permit would include site specific mitigation requirements and BMPs from the regulatory agency to ensure compliance with state standards.

Conclusion: Based on the expected low number of road stream crossings and the added level of input and oversight from regulatory agencies for the crossings that are in riparian habitat and will require permitting, it seems reasonable to conclude that they will not be a source of water quality degradation.

Appeal Issue 19. (page 11 of appeal)

The Issue: The appellant claims that the Forest Service reliance on the 404 permitting programs to suggest that the project will comply with state water quality standards belies the record and is arbitrary and capricious. For the same reason, the Forest Service's NEPA analysis is fatally flawed, as it was dependent on a mistaken premise.

The Rule, Analysis, & Conclusion: See response to appeal issue 17 & 18.

Appeal Issue 19b. (page 10 of appeal)

The Issue: The appellant asserts that the Forest Service's reasoning conflicts with the record, which acknowledges that despite any alleged storm water permits, existing projects, the proposed project and other proposed oil and gas projects will further degrade water quality on the Forest and downstream.

The Rule, Analysis, & Conclusion: See response to appeal issue 21.

Appeal Issue 20. (page 12-13 of appeal)

The Issue: The appellant claims that the proposed project will adversely impact water quality and will cause or contribute to violations of water quality standards and that these provisions conflict with the suggestion that "necessary road/pipeline stream crossings" would be allowed. Rather, such infringements on riparian areas are only permissible in the LRMP when "alternative routes have been review and rejected as being more environmentally damaging." Thus, while the Forest Plan allows stream crossings only where other feasible alternatives do not exist, the ROD allows stream crossings "as needed." Plainly, the Forest Plan is much more protective of riparian areas and consistency with the Forest Plan requires that the relevant stipulation be altered to comply with this more restrictive constraint.

Rule: The Forest Plan requires that other alternatives be considered for projects within riparian zones. It also requires evaluation of resource values for those projects (Forest Plan page IV-40).

Analysis: Resource value evaluations occur in the FEIS (Table 3-23, pg. 112-113 and description on page 128), and determine that with the exception of Sowers Creek, the project area includes no riparian habitat or perennial streams. This resource value evaluation was used in determining the extent of the riparian zones with regards to the forest plan direction. This resource value resulted in specific mitigation for Sower Creek (page 28) which includes a 150' buffer and water quality monitoring. No other riparian resource values were identified. The range of alternatives for the EIS included two action alternatives that were determined to be more environmentally damaging (Alt 1 and 2). Comparison of alternatives in the FEIS examined the relative effects of road/stream crossings to aquatic resources and the least environmentally damaging of the action alternatives was chosen.

Conclusion: The analysis includes detailed descriptions of alternatives considered that were determined to have more negative effects. With the purpose and need for action in mind, the most protective of the action alternatives was selected, complying with the Forest Plan guideline to review other alternatives.

Appeal Issue 21. (page 12 of appeal)

The Issue: The appellant claims that statement by the Forest Service that “[c]ontinued implementation of these stipulations would adequately avoid or minimize impacts to riparian areas and wetlands and prevent erosion and minimize sedimentation into perennial streams” conflicts with the record, which acknowledges that: “Existing and future oil and gas development, however, contributes to cumulative adverse impacts on water resources. These ongoing and future activities could alter existing stream flows by [sentence incomplete in appeal]”

Rule: Analysis under an EIS discloses significant effects in the ROD, which in some cases can identify affects to water quality. Under the state of Utah anti-degradation rule (Rule R317-2-3), degradation of water quality is not generally allowed.

Analysis: The analysis provided throughout the record has several key points relating to water quality. First, while 303(d) streams exist within (Antelope Creek) and downstream of the project area, the streams are listed for a pollutant that is not closely associated with the type of disturbance proposed by this project (FEIS page 115, 116; Pariette Draw TMDL page 68). Second, project design and required mitigation measures include stipulations (ROD pages 22-32) specifically designed to reduce runoff generation from disturbed areas (roads and well pads) and to prevent runoff from reaching channels. These mitigation measures are established and well known BMPs (NRCS National Conservation Practice Standards handbook, BLM Gold Book). The majority of analysis and discussion through the soil/hydrology/geology report and FEIS assert that water quality impairment is not currently caused by the road and well pad system in the area and that the expected effects of the proposed action would not degrade water quality. However, there are two statements that do not support that conclusion (FEIS page 123, page

315). It is unclear what rationale exists for those statements since they are inconsistent with the remainder of the analysis.

Conclusion: Based on the overall conclusions in the record, it does not seem likely that these two statements are correct and the rest of the analysis is incorrect. The record states very clearly in many locations that surface runoff is not the primary source of TDS loading in downstream waters and that the effects of the project are not expected to deliver sufficient runoff to downstream channels to degrade water quality.

Appeal Issue 22. (page 13 of appeal)

The Issue: The appellant claims that if any proposal and other resource activities in the area will exceed state water quality standards or forest plan standards, off-site mitigation may be required or the proposal denied until the standards can be met as outlined in the Western Uinta Basin Oil and Gas ROD.

The Rule: The Forest Plan states that which is in the appeal point (Forest Plan, Part B, pg. IV-45), and the Western Uinta Basin Oil and Gas ROD also states on page 3 the above quote, however the quote is not listed as a standard or guideline.

The Analysis: See response to AP16 too. The ROD lists several mitigations that were selected which resolve any conflicts and avoid unacceptable degradation to water quality and fisheries habitat (ROD p. 27-29). Channel and wildlife buffers, erosion control measures, and road/drainage crossing design criteria are in place to mitigate any effects. Quarterly water quality monitoring would be conducted on the most likely impacted creek (Sowers Creek) to ensure unacceptable degradation would not occur (ROD p. 28). The decision would not result in “unacceptable degradation” since the required mitigation and project design will avoid and minimize effects to riparian areas and avoidance and mitigation will eliminate any unavoidable conflicts.

The Conclusion: The ROD is not in contradiction to the Forest Plan and WUB ROD. Channel buffers along with wildlife buffers are in place however do allow for stream crossings where they are unavoidable. It is not an “unresolvable conflict” since the action can occur without permanently damaging the riparian area. The WUB ROD states that there must be an “unacceptable degradation of water quality, fisheries habitat, etc.” yet there is no definition or threshold for what is unacceptable. Clearly with the buffers and quarterly water quality monitoring the effects would be within acceptable levels. Combine that with the phased in approach and long-term implementation over 20 years, the entire project area would not be overwhelmed all at once and water quality monitoring data from the first phase can better inform operations during the second and third phases.

Appeal Issue 23. (page 13 of appeal)

The Issue: The appellant asserts that the Forest Service has not proven the project will not cause or contribute to violations of state water quality standards. The Forest Service concedes that despite this 100 to 150 foot buffer, the project will have adverse impacts on water quality.

See response to appeal issue 21.

Appeal Issue 24. (page 11 of appeal)

The Issue: The appellant asserts that the Forest Service is wrong to believe that it cannot impose additional restrictions on surface use to protect water quality under the provision of the Clean Water Act.

The Rule: the original lease included a Lease Notice for floodplains and wetlands: “All activities within these areas may be precluded or restricted in order to comply with Executive Orders 1198 and 1190, in order to preserve and restore or enhance the natural and beneficial values served by floodplains and wetlands. Mitigation measures deemed necessary to protect these areas will be identified in the environmental analysis. These areas are to be avoided to the extent possible or special measures such as road design, well pad size and location or directional drilling may be made part of the permit authorizing the activity” (FEIS, Vol. II, p. E-87-E-88).

The Analysis: The Forest Service does not believe it cannot impose additional restrictions to protect water quality. They specifically state in the Appendix E, Volume II of the FEIS: “It is our interpretation that minimum buffer distances for locating surface facilities are among the mitigation measures deemed necessary [in Executive Orders 1198 and 1190] to protect these areas.” The ROD lists 20 different mitigation measures designed to protect water quality, so alternative stipulations were considered and brought forward into the decision (ROD p. 27-29). The Forest Service explained in the “Alternatives Considered but Eliminated from Detailed Study” section in the ROD that they cannot designate additional large-scale No Surface Occupancy zones (beyond those that were designated in the Western Uinta Basin Leasing ROD) as that would violate the terms of the lease (ROD p. 12-13).

Conclusion: The Forest Service adequately considered alternative stipulations for surface use and explained why they could not alter the leases on a large-scale extent. Several mitigations including channel buffers were included in the decision.

Appeal Issue 25. (page 11 of appeal)

The Issue: The Forest Service is wrong to believe it cannot impose additional restrictions on surface use to protect water quality, as required by a non-discretionary statute such as the Clean Water Act. The agency’s failure to consider alternative stipulations is based on a false premise and therefore is arbitrary and capricious.

The Rule, Analysis, & Conclusion: See response to appeal issue 24.

Appeal Issue 26. (page 11 of appeal)

The Issue: The appellant asserts the Forest Service is wrong to believe it cannot impose additional restrictions on surface use to protect water quality, as required by a non-discretionary statute such as the Clean Water Act. The agency's failure to consider alternative stipulations is based on a false premise and therefore is arbitrary and capricious.

The Rule, Analysis, & Conclusion: See response to appeal issue 24.

Appeal Issue 27. (page 14 of appeal)

The Issue: The appellant claims that the Forest Service failed to implement the authorities under the Mineral Leasing Act of 1920, as amended by the Federal onshore oil & gas leasing reform act which was manifested by the arbitrary dismissal of a NSO in IRA action alternative, based on inaccurate presentation of the Reform Act's duties. Appellant claims that NEPA requires that all reasonable alternatives be analyzed. The EIS arbitrarily dismisses an NSO in IRA action alternatives in violation of NEPA due to an inaccurate presentation of the Reform Act duties.

The Rule:

- The Mineral Leasing Act of 1920, as amended by Federal Onshore Oil and Gas Leasing Reform Act (1987)
- Western Uinta Basin Leasing EIS
- Roadless Area Conservation Rule, 2001

The Analysis:

In the FEIS it states that the Operator would adhere to all lease and APD conditions in addition to all federal and state laws, regulations, and policies implemented through statute and/or resource management planning decisions implemented through NEPA. In addition it states that various design elements and mitigation measures were identified in the Decision Notice and Finding of No Significant Impact for the 2006 EA for Berry Petroleum's Exploration and Development Project in the ANF (Forest Service 2006a). These design elements and mitigation measures have been included within the Proposed Action in order to avoid or minimize potential adverse environmental effects. These measures are above and beyond those required by the Operator's lease stipulations. Several additional project design features/. Mitigations are applicable to address water quality concerns from the project (FEIS Vol 1 p 22)

Additionally it is felt that this appeal point is outside the scope of this analysis as the leasing stipulations had been identified, analyzed, and decided on under the Western Uinta Basin Leasing EIS. In addition the RACR specifically exempts previously issued leases. The leases as a part of this FEIS were issued in 1998.

The Conclusion:

The acting Forest Supervisor complied with applicable regulation and policy by respecting the decision to lease made under the Western Uinta Basin Leasing EIS and BLM's authority to lease oil & gas rights in compliance with the Mineral Leasing Act of 1920.

Appeal Issue 28. (page 14 of appeal)

The Issue: The appellant asserts that the Forest Service based a decision on an incorrect statement of law. The appellant feels that the Forest Service is compelled to consider a reasonable range of alternatives to the proposed project, but that it has abandoned a reasonable alternative in an arbitrary and capricious manner by rejecting NSO in IRAs.

The Rule, Analysis, & Conclusion: See response to appeal issue 34 & 36.

Appeal Issue 29. (page 15 of appeal)

The Issue: The appellant claims that the Forest Service misstates the Mineral Leasing Act by contending that the agency is barred from applying additional NSO stipulations to leased parcels when it assesses a surface plan of operations. The appellant also appears to claim that the Forest Service is compelled to consider a reasonable range of alternatives to the proposed project and is completed to evaluate an alternative that protects Roadless values in IRAs to the extent consistent with allowing development somewhere on each lease parcel.

The Rule:

The Mineral Leasing Act of 1920, as amended by Federal Onshore Oil and Gas Leasing Reform Act (1987)

Western Uinta Basin Leasing EIS

The Analysis:

The purpose and need for Forest Service action is to respond to the formal MDP from the Operator to exercise their oil and gas lease rights, and to evaluate the environmental impacts of the proposal in accordance with LRMP management direction and in accordance with NEPA. These decisions should be consistent with the previous Forest Service decisions and lease obligations, including the Western Uinta Basin Leasing EIS, with rights granted by the oil and gas leases, and with direction from the ANF LRMP and Department and Agency policies. The purpose and need for BLM action is to, in conjunction with the Forest Service, respond to the formal MDP and evaluate the impacts in accordance with NEPA. (FEIS Vol 1., p 4)

However, lease stipulations are generally developed as part of leasing decisions, prior to actual issuance of oil and gas leases, and are attached to individual oil and gas leases at the time of lease sales. The decision for the 1997 Western Uintah Basin Oil and Gas Leasing EIS allowed large parts of the South Unit of the ANF to be open for oil and gas leasing, and identified the lease stipulations to be applied, including several NSO stipulations to be applied to certain areas. Following the leasing decision, the BLM leased some of the South Unit for oil and gas development, including lands and leases inside the Project Area. Within reasonable limits, those leases give the lease holders a legal right to develop those leases, for the production of oil and gas resources. Adding additional NSO stipulations to existing oil and gas leases and proposed oil and gas developments, outside the formal leasing decision, and after the leases have already been sold, violates the terms of the leases in question. (FEIS Vol 1., p 33)

In response to agency and public issues and in conformance with NEPA analysis requirements, a range of alternatives were developed and analyzed in the FEIS. These included three action alternatives and a no action alternative. Chapter 2 of the FEIS describes each alternative in detail,

including mitigation measures common to all action alternatives. The Decision maker considered the no action and three action alternatives analyzed along with alternatives considered but eliminated from detailed study (ROD p. 9 -11).

The Conclusion: The acting Forest Supervisor complied with applicable regulation and policy by respecting the decision to lease made under the Western Uinta Basin Leasing EIS and BLM's authority to lease oil & gas rights in compliance with the Mineral Leasing Act of 1920.

Appeal Issue 30. (Page 16 of appeal)

The Issue: The appellant claims that the agency is incorrect in that it (agency) stated that it was compelled by the relevant lease agreements and lease stipulations to allow a minimum of 40 acre spacing for wells. The Lease Form referenced and incorporated into the Western Uinta Basin Leasing EIS (BLM Form 3100-11), includes no condition or stipulation providing for a minimum well-spacing – or indeed any mention of well-spacing. The same is true for more modern versions of Form 3011-11. Nor do any of the Western Uinta Basin Leasing EIS/ROD lease stipulations provide for a minimum well-spacing.

The Rule: Spacing is set by the State of Utah under R649-3-2, Location and Siting of Vertical Wells and Statewide Spacing for Horizontal Wells. In item 1, which states “In the absence of special orders of the board establishing drilling units or authorizing different well density or location patterns for particular pools or parts thereof, each oil and gas well shall be located in the center of a 40 acre quarter-quarter section, or a substantially equivalent lot or tract or combination of lots or tracts as shown by the most recent governmental survey, with a tolerance of 200 feet in any direction from the center location, a "window" 400 feet square.”

The Analysis: The Forest Service has set spacing in areas consistent with management needs, spacing ranges from 106 acre to 160 acre spacing. In the FEIS Volume 1, on Page 28, it states in Alternative 4, it “would limit surface development to a maximum of 162 well pads (averaging four well pads per section), but up to six well pads per individual section where topography does not allow optimal center-of-quarter section pad placement.” The spacing is more restrictive than the 40 acre spacing.

Under mitigation for Sage Grouse, it is 1 well per square mile, “Within 4 miles of a lek, sage grouse habitat will be buffered by 0.6 mile. Within this buffer well pad construction will not exceed an average of one well pad/square mile (640 acres)” (FEIS Section 3.9.2.2.8 -Mitigation (Wildlife), Page 184).

The Conclusion: With Regard to the appellant's challenge, the Forest Service is in compliance with the State of Utah based on information provided in the FEIS Volume 1 and ROD Section 5.1.

Appeal Issue 31. (Page 16 of appeal)

The Issue: The appellant claims that the relevant leases were not included in the project record and therefore any reliance on them to suggest that the Forest Service was compelled to provide

for 40 acre spacing lacks a basis in the record and therefore, on its face, is arbitrary and capricious.

The Rule: Spacing is set by the State of Utah under R649-3-2, Location and Siting of Vertical Wells and Statewide Spacing for Horizontal Wells. In item 1, which states “In the absence of special orders of the board establishing drilling units or authorizing different well density or location patterns for particular pools or parts thereof, each oil and gas well shall be located in the center of a 40 acre quarter-quarter section, or a substantially equivalent lot or tract or combination of lots or tracts as shown by the most recent governmental survey, with a tolerance of 200 feet in any direction from the center location, a "window" 400 feet square.”

The Analysis: The leases involved with this action are listed in Table 1-1, Federal Mineral Leases and Associated Stipulations, of the FEIS Volume 2 - Appendix A - Berry Master Development Plan, pages 8-10. The 40 acre spacing as allowed by the State of Utah is not arbitrary and capricious.

The Conclusion: With Regard to the appellant’s challenge, the Forest Service is in compliance with listing the involved leases and with the State of Utah based on information provided in FEIS Volume 1, pp. and FEIS Volume 2, Appendix A, respectively.

Appeal Issue 32. (Page 17 of appeal)

The Issue: The appellant claims that the Forest Service incorrectly assumed it was compelled to allow for 40 acre spacing. They claim the Forest service based its analysis, including the range of reasonable alternatives, on an incorrect assumption central to consideration of the development proposal. Such a basic mistake means that the entirety of the agency’s analysis was tainted and, therefore, must be redone on the basis of a correct understanding of it leases issued under the Western Uinta Basin Leasing EIS/ROD.

The Rule: Spacing is set by the State of Utah under R649-3-2, Location and Siting of Vertical Wells and Statewide Spacing for Horizontal Wells. In item 1, which states “In the absence of special orders of the board establishing drilling units or authorizing different well density or location patterns for particular pools or parts thereof, each oil and gas well shall be located in the center of a 40 acre quarter-quarter section, or a substantially equivalent lot or tract or combination of lots or tracts as shown by the most recent governmental survey, with a tolerance of 200 feet in any direction from the center location, a "window" 400 feet square.”

The Analysis: The Forest Service has set spacing in areas consistent with management needs, spacing ranges from 106 acre to 160 acre spacing. In the FEIS Volume 1, on Page 28, it states in Alternative 4, it “would limit surface development to a maximum of 162 well pads (averaging four well pads per section), but up to six well pads per individual section where topography does not allow optimal center-of-quarter section pad placement.” The spacing is more restrictive than the 40 acre spacing.

In the northern section of this Master Development Plan is based on 40 acre spacing. In the FEIS Vol 1, page 5, “The proposed locations and spacing of wells would be consistent with the

State of Utah spacing rules. In general, in the northern portion of the Project Area, wells would be drilled on approximately 40-acre spacing. “

Under mitigation for Sage Grouse, it is 1 well per square mile, “Within 4 miles of a lek, sage grouse habitat will be buffered by 0.6 mile. Within this buffer well pad construction will not exceed an average of one well pad/square mile (640 acres)” (FEIS Section 3.9.2.2.8 -Mitigation (Wildlife), Page 184).

The Conclusion: With Regard to the appellant’s challenge, the Forest Service is in compliance with the State of Utah based on information provided in the FEIS Volume 1 and ROD Section 5.1.

Appeal Issue 33. (page 14 of appeal)

The Issue: The appellant states that under the Forest Plan, no stream crossings related to oil and gas development are permissible. This is because a feasible alternative to allowing these crossings exists – a riparian NSO stipulation without exceptions.

The Rule, Analysis, & Conclusion: See response to appeal issue 16 & 20.

Appeal Issue 34. (page 14 of appeal)

The Issue: The appellant asserts that the Forest Service based a decision on an incorrect statement of law. The appellant feels that the Forest Service is compelled to consider a reasonable range of alternatives to the proposed project, but that it has abandoned a reasonable alternative in an arbitrary and capricious manner by rejecting NSO in IRAs based upon the Reform Act.

The Rule, Analysis, & Conclusion: See response to appeal issue 36.

Appeal Issue 35. (page 36 of appeal)

The Issue: The appellant claims that in order to meet the protections recommended, the EIS would have had to have had an alternative with no more than 1 well per section for areas inside the 4 mile buffer around leks but that such restrictions were never contemplated and thus the BE’s determination of no adverse effects to Sage-grouse is arbitrary and inaccurate and sensitive species policy and the LRMP have been violated.

The Rule & the Analysis: The appellant is referring to a recently released document from the Bureau of Land Management’s Sage-grouse National Technical Team (NTT). The document is titled “A Report on National Greater Sage-Grouse Conservation Measures.” This is preliminary guidance in the first phase of a national strategy to preserve, conserve, and restore sagebrush habitats. The report states the following in this respect:

“The conservation measures described in this report are not an end point but, rather, a starting point to be used in the BLM’s planning processes. Due to time constraints, they are focused

primarily on priority sage-grouse habitat areas. General habitat conservation areas were not thoroughly discussed or vetted through the NTT, and the concept of connectivity between priority sage-grouse habitat areas will need more development through the BLM planning process” (NTT 2011, p.5).

The BLM published a Notice of Intent in the Federal Register on December 9, 2011 stating that the BLM and Forest Service were initiating several Environment Impact Statements and Supplemental Environmental Impact Statements to incorporate sage-grouse conservation measures into Land Use Plans and Land Management Plans by September 2014. Plans that are currently under revision (such as the Ashley National Forest) would consider incorporating the same conservation measures through the revision process or through a separate analysis (Federal Register, Vol. 76, No. 237, pp. 77008-77011).

The Forest Plan contains the following direction on sensitive species on page IV-30: Resource management activities will be allowed if they will not adversely affect any T and E or sensitive species. This statement is further qualified by looking at the introduction to the Forest Plan Standards and Guidelines on page IV-1: “The standards and guidelines define and specify the conditions to be maintained or achieved through the management activities. Should conflict occur between standards and guidelines, the conflict will be resolved in favor of the direction which produces the greatest degree of multiple use value.”

Forest Service Sensitive Species policy is found in Forest Service Manual 2670. The appellant does not indicate which policy in particular the project is violating, however the most important portion of the sensitive species policy is found in FSM 2670.32(4): the decision must not result in loss of species viability or create significant trends toward federal listing.

The Forest Service is not required to meet the protections listed in NTT report unless and until they become part of the Forest Plan. The protections listed in the report are being analyzed in a separate NEPA process as part of the national cooperative strategy to update Land Use Plans (BLM) and Land Management Plans (Forest Service). The report states that the conservation measures listed in the report are a “starting point” in the planning process to be evaluated, refined, and adjusted.

Many of the conservation measures that are recommended in the NTT report are consistent (and likely were influenced by) the Wyoming BLM guidance in response to the Wyoming Governors Greater Sage-Grouse Core Area Protection Executive Order 2010-4, which is discussed on page E-14 of the Biological Evaluation.

Included in the BLM guidance was the threshold for 1 disturbance per 640 acres (Project Record Document 0314, p. 9). One section is on average 640 acres or one square mile. The report by the NTT also quantifies a section as one-mile, and details that the one disturbance/section (or mile) applies to priority areas (NTT, p.7). The NTT report defines priority areas as “Priority sage-grouse habitats are areas that have the highest conservation value to maintaining or increasing sage-grouse populations. These areas would include breeding, late brood-rearing, winter concentration areas, and where known, migration or connectivity corridors” (NTT 2011, p. 7). Priority areas are not all areas within the 4-mile buffer as the appellant asserts.

The BE identifies priority areas and habitat based upon recent telemetry data and analyzes the impacts of well pad densities, and proposes mitigations to reduce impacts (BE, p. E-30-E-33). Based up on the mitigations listed in Alternative 4 the BE reaches a reasonable determination for sage-grouse and is not arbitrary (BE, p. E-36). The BE did not find that there were no adverse effects to sage-grouse as the appellant stated in the appeal; the exact determination for Alternative 4 was “may impact individuals but is not likely to cause a trend to federal listing or loss of viability.” In addition, the adverse effects were described and analyzed in the BE in adequate detail (BE p. E-26 to E-39). The BE is also in accordance with all requirements described in FSM 2670, which contains the Forest Service’s sensitive species policy.

The ROD lists several mitigations to reduce disturbance to sage-grouse, many of which are listed in the NTT report (ROD, p. 31-32) and is supported adequately by the BE. The ROD does not violate FSM 2670.32(4) because the decision is supported by the BE which found that the action would not result in loss of species viability or create a significant trend toward federal listing (BE, p. E-36).

The ROD also does not violate Forest Plan Standards and Guidelines and states as such on pages 7 and 13. The Forest Plan directs that if conflicts occur with standards and guidelines (such as described for sensitive wildlife species on page IV-30 of the Forest Plan), that “the conflict will be resolved in favor of the direction which produces the greatest degree of multiple use value.” (Forest Plan, p. IV-1). The ROD contains sufficient documentation to support multiple use values (ROD p. 6-7).

Conclusion: The BE’s determination is adequately supported, and therefore the ROD is sufficiently supported. The decision does not violate FSM 2670 or the Forest Plan.

Appeal Issue 36. (page 16 of appeal)

The Issue: The appellant claims, that while the Forest Service may ultimately be authorized to allow surface occupancy in IRAs, the appellant asserts that the Forest Service may not dismiss consideration of that alternative because it has wrongly interpreted the law and that the Forest Service is compelled to use its environmental analysis to make a well informed decision.

The Rule: As per the Roadless Rule (**3256 Federal Register** / 1/12/2001/ Rules and Regulations), “Existing leases are not subject to the prohibitions. The Department has decided to adopt a more limited exception at 36 CFR 94.12(b)(7) to allow road construction needed in conjunction with the continuation, extension, or renewal of a mineral lease, on lands that were under lease by the Secretary of the Interior as of the date of publication of this rule”.

The Analysis: The analysis includes an Alternative Considered but Eliminated from Detailed Study (ROD p.5) that explains why NSO in IRA is not contemplated. The analysis correctly states that additional NSO within the established leases are not provided for in the lease.

In response to agency and public issues and in conformance with NEPA analysis requirements, a range of alternatives were developed and analyzed in the FEIS. These included three action

alternatives and a no action alternative. Chapter 2 of the FEIS describes each alternative in detail, including mitigation measures common to all action alternatives. The Decision maker considered the no action and three action alternatives analyzed along with alternatives considered but eliminated from detailed study (ROD p. 9 -11).

The Conclusion: The lease itself is a contractual instrument and thereby establishes the surface occupancy. The lease stipulations established by the leasing EIS/ROD (1997) were issued prior to the Roadless Rule (2001), and therefore take precedence over the later IRA establishment. No additional NSO is justified. The FEIS and ROD are correct.

Appeal Issue 37. (Page 17 of appeal)

The Issue: The appellant claims that an assumption that the 40 acre spacing is dictated by the Western Uinta Basin Leasing EIS/ROD is not only incorrect, but also undermines the leasing process put in place by the Reform Act.

The Rule: Spacing is set by the State of Utah under R649-3-2, Location and Siting of Vertical Wells and Statewide Spacing for Horizontal Wells. In item 1, which states “In the absence of special orders of the board establishing drilling units or authorizing different well density or location patterns for particular pools or parts thereof, each oil and gas well shall be located in the center of a 40 acre quarter-quarter section, or a substantially equivalent lot or tract or combination of lots or tracts as shown by the most recent governmental survey, with a tolerance of 200 feet in any direction from the center location, a "window" 400 feet square.”

In regards to spacing the Federal Onshore Oil Gas Leasing Reform Act, in § 226, Lease of oil and gas lands, M, states “Any plan authorized by the preceding paragraph which includes lands owned by the United States may, in the discretion of the Secretary, contain a provision whereby authority is vested in the Secretary of the Interior, or any such person, committee, or State or Federal officer or agency as may be designated in the plan, to alter or modify from time to time the rate of prospecting and development and the quantity and rate of production under such plan. All leases operated under any such plan approved or prescribed by the Secretary shall be accepted in determining holdings or control under the provisions of any section of this chapter.”

The Analysis: The Secretary of Agriculture or the delegated Authorized Officer has the ability to modify the spacing. This is met by the Forest Service. The Forest Service has increased spacing where required (FEIS Section 3.5.2.2.4 -Alternative 4 (Soils), Page 107, Section 3.9.2.2.8 -Mitigation (Wildlife), Page 184,)

The Conclusion: With Regard to the appellant’s challenge, the Forest Service is in compliance with the State of Utah based on information provided in the FEIS Volume 1 and ROD Section 5.1. The Forest Service is also in compliance with the Federal Onshore Oil Gas Leasing Reform Act, by requiring spacing greater than 40 acres in areas that need additional space due to topography or other natural resource requirements (FEIS Section 3.5.2.2.4 -Alternative 4 (Soils), Page 107, Section 3.9.2.2.8 -Mitigation (Wildlife), Page 184,).

Appeal Issue 38. (Page 18 of appeal)

Issue: The appellant asserts that the Forest Service must comply with NEPA's "hard look" requirement and in addition, must explain how its actions will or will not comply with environmental laws and policies.

Rule: Clean Air Act

Analysis: This appeal point occurs in the context of the air quality analysis completed for the project. The USFS has examined how this project will comply with the National Ambient Air Quality Standards as required under the Clean Air Act. The FEIS includes an analysis of impacts to criteria pollutants listed in the NAAQS that demonstrates compliance with these standards. See response to Appeal Issue 41. The FEIS acknowledges that a quantitative analysis to demonstrate compliance with the NAAQS for ozone cannot be completed, and that information on ozone impacts may be incomplete. See response to Appeal Issue 45. Prevention of Significant Deterioration (PSD) increment limits are relevant in the context of major source permitting and are not ambient air quality standards. Oil and gas sources are generally not considered major sources, and the USFS is not obligated to protect PSD increment limits. See response to Appeal Issue 41.

Conclusion: The USFS has explained how its actions will comply with applicable sections of the Clean Air Act.

Appeal Issue 39. (Page 29 of appeal)

Issue: The appellant asserts that the Forest Service failed, in the EIS, to address the proposed actions [truck traffic related environmental impacts] clearly foreseeable additive or cumulatively negative additions to this Wasatch Front-specific air quality impact renders it inadequate under NEPA, as well as the Clean Air Act.

Rule: The Forest Service Handbook (FSH 1909.15-10-15.2(a)) states the following in regards to effects analysis: "The affected area is the area in which a specific resource may be affected by management actions."

FSH 1909.15-10-15 also states: "...the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant."

FSM 2672.4 Biological Evaluations provides process requirements for FS Sensitive species.

Traffic safety is regulated by law enforcement, which is the jurisdiction of County and State.

Analysis: FEIS Section 3.14 (pp. 266-272) discusses truck and traffic-related impacts within the analysis area in regards to safety, air quality, and wildlife. The proponent was not required to identify haul routes or refineries that would be used since they are outside of the project area and

outside of National Forest System Land. It is equally possible that the oil would be hauled to refineries in Wyoming instead of North Salt Lake, or Colorado, Oklahoma, New Mexico, etc. The Forest Service focused the analysis on the area where meaningful and measurable effects would most likely occur. There is no requirement that the Forest Service analyze all possible scenarios where the oil may be hauled to and refined.

Truck traffic, including trips to transport oil out of the project area, were included in the dispersion modeling analysis (FEIS Vol II, Appendix C, p. C-17, p. C-19, and Table A4, pg. C-87). The results of the dispersion modeling analysis included impacts to air quality within the analysis area described below.

The FEIS (Section 3.2.2.1, p. 63, and Vol II, Appendix C, p. C-1) indicates that the analysis area for air quality impacts includes the area surrounding the proposed project area and all or a portion of seven listed wilderness areas, seven named national parks, one national recreation area, and one national wildlife refuge. The Wasatch Front is not included in the analysis area. In addition, identification of potential travel routes and destinations for trucks transporting oil out of the project areas to refineries is highly speculative as there is no way to foresee which facilities will receive the oil in the future. Performing an analysis of truck haul impacts to air quality along the Wasatch Front is thus beyond the scope of this analysis.

In regards to sensitive species policy, the Biological Evaluation fulfills all the requirements in FSM 2670, particularly 2672.4. In addition the Forest Plan standards and guidelines have been met. According to page IV-1 of the forest plan, "The standards and guidelines define and specify the conditions to be maintained or achieved through the management activities. Should conflict occur between standards and guidelines, the conflict will be resolved in favor of the direction which produces the greatest degree of multiple use value." The deciding official has adequately supported the determination that the decision provides the greatest multiple use value (ROD p. 6).

Truck Traffic is sufficiently quantified (Appendix A): Quantification includes miles and density of new access roads, miles and density of existing roads that would be improved and change in Annual Average Daily Traffic (AADT) and accident rates.

The analysis of effects of truck traffic on human safety is minimal, but appears to be sufficient. Most aspects of traffic safety are outside the scope of the analysis and are under the jurisdiction of County and State vehicle and traffic regulations. The cumulative effects area for truck traffic is limited to National Forest lands within the Project Area.

Conclusion: The FEIS adequately analyzed all known potential traffic-related effects. The analysis and documentation are sufficient.

Appeal Issue 40. (Page 29 – 30 of appeal)

The Issue: The appellant claims that the EIS never accounts for the additive and cumulative impact (e.g. road kill/direct taking, noise and pollution/indirect impact) of the 50-100 oil truck

passings per day over 20-40 years renders the EIS inadequate under NEPA, the USFS Sensitive species policy, and Ashley LRMP standards for Sensitive species.

The Rule, Analysis, & Conclusion: See response to appeal issue 39 and 44.

Appeal Issue 41. (Page 18 of appeal)

Issue: The appellant states that the USFS must meet the National Ambient Air Quality Standards (NAAQS) and Prevention of Significant Deterioration (PSD) increment limits air quality standard.

Rule: Clean Air Act

Analysis: The air analysis presented in the FEIS (FEIS Section 3.2.2.2, pp. 64-69, and Appendix C, Section 3.4, pp. C-14 to C-19, Section 4.6, pp. C-52 to C-62) demonstrated compliance with NAAQS for PM₁₀, PM_{2.5}, NO₂, CO, and SO₂ for the near-field analysis for the production phase and for PM₁₀, PM_{2.5}, NO₂, and SO₂ for the far-field analysis. Only one potential negative impact to air quality standards was identified in the construction phase for the near-field analysis. The near-field analysis for the construction phase was conducted for two different scenarios. The first scenario assumed simultaneous construction of well pads, roads, and compressor stations, as well as fully deteriorated engines (FEIS Appendix C, p. C-16). This scenario presented a theoretical maximum for construction emissions, as roads must be built before well pads and compressor stations can be constructed. Under this scenario, the maximum modeled 24-hour PM_{2.5} concentration in the near field is above the corresponding ambient air quality standard (p. C-16), but other ambient air quality standards are met. The second construction scenario is still quite conservative but much more realistic. This scenario assumed that roads are built before well pad and compressor station construction begins, and that engines are 40% deteriorated. The second scenario also made additional conservative assumptions to ensure that PM_{2.5} impacts during the construction phase would not be underestimated (South Unit Air Quality Response to Comments on Technical Support Document 2010 12 06, pp. 4-5). Under these more realistic assumptions, the PM_{2.5} ambient air quality standard is met (as well as other ambient air quality standards).

As indicated in the FEIS (Appendix C, pp. C-54 and C-59), the PSD increment analyses presented here are for informational purposes only and do not constitute a regulatory PSD increment consumption analysis. Class I and Class II increments are not ambient air quality standards. Increments are relevant in the context of major source permitting, as specified in the Prevention of Significant Deterioration program (40 CFR 51.166). The CFR specifies (51.166 (a), 51.166(c)) that state implementation plans must ensure that increases in pollutant concentrations over baseline conditions do not exceed limits specified for Class I and Class II areas. Once the increment in a given area has been consumed, no new major emissions sources can be constructed (where "major" sources are defined in 51.166 (b) (1) (i)). Oil and gas emission sources generally do not meet the definition of major sources. Major source permitting is the responsibility of the state. The Forest Service is not obligated to protect increments. NEPA analyses are not considered regulatory analyses for purposes of determining increment consumption; information provided here comparing impacts from potential development to allowable increments is provided for information only. The Forest Service provides this

information because the US EPA and some other federal agencies, as well as state regulatory agencies, find this information to be helpful for planning purposes.

Conclusion: The analysis demonstrates that the project is in compliance with the Clean Air Act.

Appeal Issue 42. (Page 17 of appeal)

Issue: The appellant claims that the USFS has not satisfied its duty of ensuring that the South Unit will not violate federal air quality standards, specifically that the South Unit FEIS and ROD indicated that the planned development here will violate federal and state standards for ozone pollution and particulate matter.

Rule: Clean Air Act

Analysis: The FEIS does not indicate that the development will violate federal and state standards air quality standards. As stated in the response to Appeal Issue 41, the planned development is not expected to exceed standards for particulate matter. Impacts to ozone concentrations are addressed in the response to Appeal Issue 45.

Conclusion: The FEIS and ROD do not indicate that the development will violate federal and state standards for ozone and particulate matter.

Appeal Issue 43: Appeal Point deleted in final Appeal Transmittal Letter submitted by the Ashley National Forest.

Appeal Issue 44. (Page 18 of appeal)

Issue: The appellant asserts that to meet its substantive duties, the USFS cannot simply defer to state or federal regulations to demonstrate that the NAAQS and PSD increments for pollutants under the Clean Air Act will be protected.

Rule: Clean Air Act

Analysis: The FEIS addresses impacts to NAAQS for criteria pollutants, but is not obligated to protect PSD increments. See responses to Appeal Issues 41 and 45.

Conclusion: The USFS has demonstrated compliance with the Clean Air Act.

Appeal Issue 45. (Page 18 of appeal)

Issue: The appellant claims that the South Unit will add more ozone pollution to any already excessively polluted area and that the USFS failed to show that air quality standards would not have been exceeded, which it did not do.

Rule: Clean Air Act

Analysis: The FEIS discusses the impacts of the project to ozone concentrations in Section 3.2.2.3.5 (pp. 70-80). As indicated in the FEIS, impacts to ozone can only be addressed on a regional scale (p. 70), and it is thus not appropriate to model ozone concentrations resulting from this project by itself. The cumulative analysis discussion (FEIS p. 72) notes that a novel photochemical analysis could not be completed for a cost that would not be exorbitant. As indicated in the FEIS (p. 54), the mechanisms for winter ozone formation are not well understood, and this is currently an active area of research. The FEIS acknowledges that information on ozone cumulative effects is thus incomplete or unavailable (p. 71) in accordance with CEQ regulations. The FEIS (pp. 72-80) summarizes the best available scientific information at the time of writing, the Uintah Basin Air Quality Study (UBAQS). The FEIS acknowledges that UBAQS has shortcomings and thus information on impacts to ozone concentrations is incomplete (p. 79). The ROD (pp. 22-23) and FEIS (pp. 30-32) detail specific mitigation measures designed to limit emissions of ozone precursors, and thus mitigate impacts to ozone concentrations from the project. As detailed in the response to comments (FEIS Vol II p. E-25), the USFS worked with the EPA in developing the details of this approach to ensure that it met their satisfaction. The FEIS also notes (p. 80) that additional modeling is ongoing that will provide information to assess winter ozone concentrations in the future.

Conclusion: The FEIS has properly addressed impacts to ozone concentrations in the Uintah Basin.

Appeal Issue 46. (Page 21 of appeal)

Issue: The appellant claims that the USFS has not met its obligation to observe federal air quality standards for ozone pollution.

Rule: Clean Air Act

Analysis: The USFS has put in place requirements for aggressive emissions mitigation (FEIS Table 3-13, p. 73, and FEIS Table 3-14, p. 75, and pp. 30-32). The USFS and EPA agreed that additional quantitative ozone modeling is not appropriate for this project due to the mitigation measures agreed to by the operator (FEIS p. 70). The operator will also be required to operate an ozone monitoring station; data from this station will be provided to the state and EPA. The FEIS also indicates that the USFS is aware that complete information on potential impacts to ozone concentrations is not complete; see response to Appeal Issue 45.

Conclusion: The USFS has met its obligations with respect to federal ozone air quality standards.

Appeal Issue 47. (Page 21-22 of appeal)

Issue: The appellant claims that the South Unit FEIS asserts that this project will produce levels of pollution that will exceed federal air quality standard limits on particulate matter pollution.

Rule: Clean Air Act

Analysis: The scenario referred to for the construction phase could not reasonably occur, as well pads and compressor stations cannot be constructed before roads are in place to reach them. The analysis shows that for a conservative yet realistic construction scenario the project is expected to comply with PM_{2.5} standards. See response to Appeal Issue 41.

Conclusion: The FEIS demonstrates that the project will comply with federal standards for PM_{2.5}.

Appeal Issue 48. (Page 22-23 of appeal)

Issue: The appellant asserts that the South Unit FEIS likely understates the background values for fine particulates.

Rule: No rule identified

As indicated in the FEIS Vol II (Appendix C, p. C-16) and the South Unit Air Quality Response to Comments on Technical Support Document 2010 12 06 (pg. 4), the Utah Department of Environmental Quality Division of Air Quality specifically recommended the use of the PM_{2.5} background value of 27.6 mg/m³ for a 24-hour average 98% value. This value represents an appropriate average winter background. PM_{2.5} values in the area are typically highest in winter.

Conclusion: The analysis used an appropriate background value to assess impacts to PM_{2.5} concentrations.

Appeal Issue 49. (Page 23 of appeal)

Issue: The appellant asserts that the South Unit FEIS completely ignores the impacts of secondary PM_{2.5} formation.

Rule: Clean Air Act

Analysis: The FEIS did address secondary PM_{2.5} particulate formation. As indicated by the FEIS Vol II (Appendix C, p. C-34), the CALPUFF dispersion modeling analysis included the use of algorithms to account for formation of secondary organic aerosol and the conversion of sulfur dioxide to sulfate and nitrogen oxides to nitrate.

Conclusion: The FEIS does not ignore the impacts of secondary PM_{2.5} formation.

Appeal Issue 50. (Page 23-24 of appeal)

Issue: The appellant claims that the analysis for the South Unit FEIS indicates that this project will exceed PSD increment limits for coarse and fine particulates.

Rule: Clean Air Act

Analysis: The discussion referenced in the appeal (FEIS p. 65) is a presentation of modeled air quality impacts to National Ambient Air Quality Standards, not a PSD increment analysis. Furthermore, PSD increments are only applicable in the realm of major source permitting, which is performed by the state, and the USFS is not obligated to protect PSD increments. See response to Appeal Issue 41.

Conclusion: The USFS is not required to prepare a regulatory PSD increment analysis.

Appeal Issue 51. (Page 23-24 of appeal)

Issue: The appellant claims that the analysis for the South Unit FEIS indicates that this project will exceed PSD increment limits for coarse and fine particulates.

Analysis: See response to Appeal Issue 50.

Conclusion: The USFS has appropriately addressed PSD increments.

Appeal Issue 52. (Page 24 of appeal)

Issue: The appellant claims that the South Unit fails to take a hard look at cumulative impacts to air quality from the development of this project as well as ongoing, planned, and reasonably foreseeable activity in the Uinta Basin.

Rule: Clean Air Act, CEQ Regulation 1508.7

Analysis: A CALPUFF dispersion modeling analysis was performed that examined cumulative impacts to concentrations of nitrogen oxides, sulfur dioxide, particulate matter, and carbon monoxide (FEIS Section 3.2.2.2, pp. 64-69, and Appendix C, Section 3.4, pp. C-14 to C-19, Section 4.6, pp. C-52 to C-62). This analysis took into account ongoing and reasonably foreseeable activity in the project area. As stated in the FEIS, a quantitative cumulative analysis could not be undertaken for ozone concentrations. The USFS and EPA agreed that additional quantitative ozone modeling is not appropriate for this project due to the mitigation measures agreed to by the operator (FEIS p. 70). See response to Appeal Issue 45.

Conclusion: The USFS did take a hard look at cumulative impacts to air quality.

Appeal Issue 53. (Page 24-25 of appeal)

Issue: The appellant asserts that the attempts of the South Unit FEIS to rely on the Uinta Basin Air Quality Study (UBAQS) are completely inadequate. As the EPA warned, UBAQS only examines cumulative impacts through 2012 and is therefore not valid for the life of this project. See Administrative Record, Folder 6, Subfolder 5, Comments of the EPA 9 (Apr. 26, 2010). In essence, the South Unit FEIS only considers cumulative impacts from before this project will even take place. The EPA questioned the value of this analysis for that reason as well as its significant inadequacies. In addition the appellant claims that the UBAQS was developed before

monitoring data showed that winter ozone levels in the Uinta Basin were well above federal standards; UBAQS is inconsequential and meaningless for that reason alone.

Rule: CEQ regulations (cumulative impacts)

Analysis: The USFS did not rely solely on the UBAQS study to provide information on potential impacts to ozone concentrations within the Uintah Basin. The Forest Service acknowledges in the FEIS that information on potential ozone impacts is potentially incomplete (FEIS p. 72). The FEIS also states that the USFS feels that the use of the UBAQS is appropriate only in the limited NEPA disclosure context inherent in CEQ's guidance on incomplete information, and that the UBAQS study should not be used to estimate potential ozone impacts of the project in relation to other sources in the region (FEIS p. 79). The USFS took other steps, including a qualitative analysis and measures to mitigate emissions of ozone precursors, to address ozone impacts. The USFS and EPA agreed that additional quantitative ozone modeling is not appropriate for this project due to the mitigation measures agreed to by the operator (FEIS p. 70). See response to Appeal Issue 45. As detailed in the response to comments (FEIS Vol II p. E-25), the USFS worked with the EPA in developing the details of this approach to ensure that it met their satisfaction. In comments provided by EPA to USFS on the FEIS on 9 April 2012, EPA did not recommend any additional photochemical analyses to address ozone impacts at this time, but suggested that USFS consider new information that will be available in the future from an on-going BLM air quality study (0470 South Unit EPA Comment Letter on FEIS 2012 04 09.pdf). See response to AP52 too.

Conclusion: The USFS properly addressed potential cumulative air quality impacts.

Appeal Issue 54. (Page 25 of appeal)

Issue: The appellant identifies from the UBAQS that the predicted concentrations for ozone in the project area will violate the new standards proposed by the EPA for the ozone NAAQS.

Rule: Clean Air Act

Analysis: This appeal point refers to a statement in the appeal that says that the UBAQS study predicted ozone standard violations in the Uintah Basin. As mentioned in the response to Appeal Issue 53, the USFS indicates in the FEIS that the use of the UBAQS is appropriate only in the limited NEPA disclosure context inherent in CEQ's guidance on incomplete information, and that the UBAQS study should not be used to estimate potential ozone impacts of this project in relation to other sources in the region (FEIS p. 79). The FEIS also acknowledged that a quantitative cumulative ozone analysis cannot be completed, and that therefore information on ozone impacts is potentially incomplete. The USFS and EPA agreed that additional quantitative ozone modeling is not appropriate for this project due to the mitigation measures agreed to by the operator (FEIS p. 70). See responses to Appeal Issues 45 and 53.

Conclusion: The FEIS does not indicate that the project will result in violations of the ozone ambient air standard.

Appeal Issue 55. (Page 25 of appeal)

The Issue: The appellant asserts that the South Unit FEIS still attempts to rely on the UBAQS if acknowledging all of the reports shortcomings and this does not constitute a “hard look”.

The Rule: CEQ Regulations on Cumulative Impacts

The Analysis & Conclusion: The FEIS does not attempt to rely on the UBAQS study. See responses to Appeal Issues 45 and 53, 55-56.

The Conclusion: The FEIS does not attempt to rely on the UBAQS study.

Appeal Issue 56. (Page 25 of appeal)

Issue: Appellant asserts that NEPA requires that an agency’s cumulative impacts analysis provide “quantified or detailed information... (“[P]erfunctory references do not constitute analysis useful to a decision maker in deciding whether, or how, to alter the program to lessen cumulative environmental impacts.”). The UBAQS analysis simply does not satisfy this standard.

Rule: CEQ Regulations on Cumulative Impacts

Analysis: A quantitative cumulative analysis was performed that examined impacts to concentrations of nitrogen oxides, sulfur dioxide, particulate matter, and carbon monoxide (FEIS Section 3.2.2.2, pp. 64-69, and Appendix C, Section 3.4, pp. C-14 to C-19, Section 4.6, pp. C-52 to C-62). This analysis took into account ongoing and reasonably foreseeable activity in the project area. As stated in the FEIS, a quantitative cumulative analysis could not be undertaken for ozone concentrations, and acknowledges that information on cumulative ozone impacts may be incomplete. The USFS and EPA agreed that additional quantitative ozone modeling is not appropriate for this project due to the mitigation measures agreed to by the operator (FEIS p. 70). See response to Appeal Issue 45. The FEIS does not rely upon the UBAQS analysis for a cumulative ozone analysis. See response to Appeal Issue 53.

Conclusion: USFS has properly addressed cumulative impacts to air quality.

Appeal Issue 57. (Page 25 & 26 of appeal)

Issue: The appellant claims that the UBAQS and USFS cumulative air quality analysis, which ends the year the project begins, does not satisfy the NEPA cumulative effects standard.

Rule: CEQ Regulations on Cumulative Impacts

Analysis: A quantitative cumulative analysis was performed that examined impacts to concentrations of nitrogen oxides, sulfur dioxide, particulate matter, and carbon monoxide (FEIS Section 3.2.2.2, pp. 64-69, and Appendix C, Section 3.4, pp. C-14 to C-19, Section 4.6, pp. C-52 to C-62). This analysis took into account ongoing and reasonably foreseeable activity in the

project area. As stated in the FEIS, a quantitative cumulative analysis could not be undertaken for ozone concentrations, and acknowledges that information on cumulative ozone impacts may be incomplete. The USFS and EPA agreed that additional quantitative ozone modeling is not appropriate for this project due to the mitigation measures agreed to by the operator (FEIS p. 70). See response to Appeal Issue 45. The FEIS acknowledges the limitations of the UBAQS study, including the fact that the study is not particularly useful for development activities occurring beyond 2012 (FEIS p.79). The FEIS therefore does not rely upon the UBAQS analysis for a cumulative ozone analysis. See response to Appeal Issue 53.

Conclusion: The USFS has properly addressed cumulative air quality impacts.

Appeal Issue 58. (Page 26 of appeal)

Issue: Appellant asserts that the EIS does not adequately account for the truck traffic related environmental impacts of periodic work overs or recompletions of the wells approved. However the impacts are more than reasonably foreseeable, as they are contemplated in the Master Development Plan: The Traffic-related analysis in the EIS is should have included (presumably around 7 days) annual light and heavy truck trips and traffic estimates per well for production years 6-20 (15 years per well).

The Rule, Analysis, & Conclusion: See response to appeal issue 39.

Appeal Issue 59. (Page 27 of appeal)

The Issue: The appellant claims that the BE/BAs, EIS, and ROD all become inadequate in regards to each of these significant issues/resources that were supposed to be studied in detail [truck traffic related environmental impacts]. This constitutes evidence in and of itself of a failure to meet NEPA's requirement to take a hard look at the potential impacts.

The Rule: NEPA

The Analysis: BE/BA

The Conclusion: traffic-related effects were analyzed in adequate detail. See Appeal Issue 39 for info on cumulative effects analysis boundaries.

Appeal Issue 60. (Page 27 of appeal)

The Issue: The appellant claims that this [truck traffic related environmental impacts] additionally, amplifies and aggravates failures to meet LRMP/NFMA and USFS Sensitive species policy duties outlined in detail in the section of this appeal below on Sage-grouse.

The Rule, Analysis, & Conclusion: See response to appeal issue 39.

Appeal Issue 61. (Page 28 of appeal)

The Issue: The appellant claims that the reasonably foreseeable truck traffic related impacts (direct, indirect, and cumulative) to human safety; air quality and wildlife will be measurable and significant along the oil field – refinery haul route. Systematically overlooked in the EIS, it is common knowledge that the oil is being and will be refined at one or more of the refineries in the North Salt Lake area.

The Rule, Analysis, & Conclusion: See response to appeal issue 39.

Appeal Issue 62. (Page 29 of appeal)

The Issue: The appellant claims that the failure to include disclosure or analysis of the human traffic safety-related impacts along this 120 mile route renders the EIS inadequate under NEPA. Appellants note that EIS section 1.8.11 even identifies transportation related impacts from truck haul on access roads to be a significant issue to be analyzed in detail. Change in annual average daily traffic and accident rates was to be a measurement indicator for the EIS. This renders the EIS inadequate under NEPA; a failure to take NEPA's hard look and potential impacts.

The Rule, Analysis, & Conclusion: See response to appeal issue 39.

The Conclusion: Look at FEIS and ROD- doesn't appear that they state anywhere that it would be North Salt Lake. This "common knowledge" accusation is not legally defensible. They could easily be shipping off to a refinery elsewhere, even Colorado, New Mexico, Oklahoma, etc. For effects discussion this is redundant with Appeal Issue 40, 59, and 60

Appeal Issue 63. (Page 30 of appeal)

The Issue: The appellant claims that the recommendations of the National Tech Team report should have been used to inform and direct the analysis in the EIS and the basis of the associated proposed action is to implement the recommendations found in the 2011 Sage-grouse National Technical Team report entitled, "A Report on National Greater Sage-Grouse Conservation Measures." The National Technical Team's recommendations, similarly, should have been within the scope of the range of action alternatives this EIS studied in detail, but they were not. In both instances the EIS and ROD are rendered inadequate under NEPA.

Rule, Analysis, and Conclusion: See response #35.

Appeal Issue 64. (Page 33 of appeal)

The Issue: The appellant claims that even if the EIS analysis was based on a "per section" analysis (which it is not), it would still be inadequate because it sets the impact threshold at 5%, and not at the national recommendations' lower threshold of 3%. Modified alternative 4 that the ROD selects exceeds the threshold of 3% per (township and range) section in the 4 mile buffer/DDCT area.

Rule, Analysis, and Conclusion: See response #35.

Appeal Issue 65. (Page 33 of appeal)

The Issue: The appellant states that Alternative 4 was selected in the ROD, and even with its additional mitigations, it explicitly includes allowance of 162 new well pads, the same number as the original (fully studied) alternative 4. There are no maps indicating that some well pads proposed in a modified alternative 4 were dropped from the selected alternative inside sage grouse buffer areas, nor is there any map or suggestion where the additional “make up” well pads that are needed to stay at 162 new well pad number, all of which must be outside the DDCT (4 mile lek buffer) are to be located. The reality is the selected alternative (modified alternative 4) approves the same 162 new pads as ‘unmitigated’ alternative 4, and not one less. It is essentially arbitrary and capricious and never site specifically identified or studied; and constitutes much more than a failure to take NEPA’s required hard look (at the action approved).

Rule: 40 CFR 1501 NEPA. These regulations describe NEPA process and require NEPA analyses of proposed actions.

Analysis: The ROD explains on page 5 that there are 162 drill pads and 356 proposed wells, with an additional 44 wells being approved in separate NEPA decisions. The ROD also states that all 400 proposed wells were analyzed in the FEIS and approved under the decision (ROD p. 5). Analysis of sage-grouse was looked at site-specifically in the BE for all 400 wells as well as in the separate NEPA decisions (Project Record Document 0338). The environmental analysis was site-specific and does comply with the “hard look” doctrine (*Kleppe v. Sierra Club*, 427 U.S. 390 (1976)).

The Conclusion: The environmental analysis was site-specific and does comply with the “hard look” doctrine (*Kleppe v. Sierra Club*, 427 U.S. 390 (1976)).

Appeal Issue 66. (Page 36 of appeal)

The Issue: The appellant states that the ROD fails to state or explain what of those well pads are dropped and what other new ones were approved outside the DDCT to keep to total well pad approval count up at 162 well pads. This constitutes a failure to take NEPA’s hard look at the action approved. This constitutes a failure to ensure the EIS is sufficiently site-specific. This also renders the BE arbitrary and inadequate under USFS Sensitive Species policy and the LRMP, as well as NEPA.

The Rule: NEPA, FSM 2600

The Analysis: The ROD explains on page 5 that there are 162 drill pads and 356 proposed wells, with an additional 44 wells being approved in separate NEPA decisions. The ROD also states that all 400 proposed wells were analyzed in the FEIS and approved under the decision (ROD p. 5). Analysis of sage-grouse was looked at site-specifically in the BE for all 400 wells as well as in the separate NEPA decisions (Project Record Document 0338).

The Conclusion: The environmental analysis was site-specific and does comply with the “hard look” doctrine (*Kleppe v. Sierra Club*, 427 U.S. 390 (1976)).

Appeal Issue 67. (Page 36 of appeal)

The Issue: The appellant claims that the BE and ROD would both remain inadequate under USFS Sensitive species policy, and corresponding LRMP prohibitions on approving any decision with adverse impacts to Sensitive species. The reason for this is because the ‘may affect/not likely to adversely impact’ determination for modified alternative 4 is based on a set of mitigation measures that are significantly weaker than those recommended by the national sage-grouse team in 2011.

Rule, Analysis, and Conclusion: See Response to #35.

Appeal Issue 68. (Page 36 of appeal)

The Issue: The appellant states that the EIS and BE rely on disturbance per square mile averages across either the project area or the larger DDCT. “Per section” means per township and range section, not an average per square mile over a larger area. What was done results in a much lower standard, and it does not demonstrate compliance with the ‘per section’ requirement.

Rule, Analysis, and Conclusion: See Response to #35.

Appeal Issue 69. (Page 36-37 of appeal)

The Issue: The appellant asserts that one LRMP standard that has been violated is, “Resource management activities will be allowed if they will not adversely affect any T and E or sensitive species.” LRMP, p. IV-30. This explicitly applies to Management Areas D, E, and N. Together they comprise all of the lease area.

Rule, Analysis, and Conclusion: See Response to #35.

Appeal Issue 70. (Page 37 of appeal)

The Issue: The appellant asserts that there has been a failure to follow or comply with Regional Office Sensitive species policy for Sage-Grouse. This is particularly significant because under the current and older NFMA framework it is the Regional Office (and Regional Forester) that sets policies concerning preservation of ‘at risk’ species with current or predicted population viability concerns. FSM 2600. Forest Service Intermountain Region direction on greater sage-grouse states that if there is any impact to sage-grouse due to a proposed action, a BE must include the determination of “may adversely impact individuals of the species and is likely to result in a loss of viability in the planning area, and/or cause a trend toward Federal listing.

The Rule: Forest Service Sensitive Species policy is found in Forest Service Manual 2670. The appellant does not indicate which policy in particular the project is violating, however the most important portion of the sensitive species policy is found in FSM 2670.32(4): the decision must not result in loss of species viability or create significant trends toward federal listing.

The Analysis: The appellant does not reference an actual regional policy, instead their basis for the claim is a BE written by Cirrus Ecological Solutions, LC for a project on the Manti La Sal National Forest titled the Greens Hollow Coal Lease Tract Program. On page 33 of that document it states “Forest Service Intermountain Region direction on greater sage-grouse states that if there is any impact to sage-grouse due to a proposed action, then the determination of “may adversely impact individuals of the species and is likely to result in a loss of viability in the planning area, and/or cause a trend toward Federal listing” is required.” The contractor did not cite a specific reference for that policy and it is unknown where they received that information. It has been verified with the regional office that no such policy in regards to mandatory sage-grouse determinations is in existence.

The Conclusion: Regional Office policy and sensitive species policy (FSM 2670) has been followed and the BE determination is accurate and supported by adequate analysis.

Appeal Point: Appeal Issue 71. (Page 37 of appeal)

The Issue: The appellant asserts that the ROD fails to include adequate direction and legal commitments ensuring complete inventory and preservation of all paleontological resources (like fossils) exposed by approved pipeline, oil/gas pad, and related construction activities.

The Rule: In the Paleontological Resources Protection Act, there is Section 6302 MANAGEMENT, IN GENERAL.—The Secretary shall manage and protect paleontological resources on Federal land using scientific principles and expertise. The Secretary shall develop appropriate plans for inventory, monitoring, and the scientific and educational use of paleontological resources, in accordance with applicable agency laws, regulations, and policies. These plans shall emphasize interagency coordination and collaborative efforts where possible with non-Federal partners, the scientific community, and the general public. Also in Section 6304, COLLECTION OF PALEONTOLOGICAL RESOURCES. It is stated in item 3 (3) PREVIOUS PERMIT EXCEPTION.—Nothing in this section shall affect a valid permit issued prior to the date of enactment of this Act.

In SECTION 6311, SAVINGS PROVISIONS-- Nothing in this subtitle shall be construed to (1) invalidate, modify, or impose any additional restrictions or permitting requirements on any activities permitted at any time under the general mining laws, the mineral or geothermal leasing laws, laws providing for minerals materials disposal, or laws providing for the management or regulation of the activities authorized by the aforementioned laws including but not limited to the Federal Land Policy Management Act (43 U.S.C. 1701–1784), Public 24 Law 94–429 (commonly known as the “Mining in the Parks Act”) (16 U.S.C. 1901 et seq.), the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201–1358), and the Organic Administration Act (16 U.S.C. 478, 482, 551); (2) invalidate, modify, or impose any additional restrictions or permitting requirements on any activities permitted at any time under existing laws and authorities relating to reclamation and multiple uses of Federal land. The FEIS has a **Paleontological Resources** plan prepared which details handling of paleontological resources.

The Analysis: The District has prepared a form if an item or paleontological resources is discovered, provisions for a paleontologist to be on site during excavation. The FS has prepared contact sheet for instances where a paleontological resource is uncovered.

The Conclusion: With Regard to the appellant's challenge, the Forest Service is in compliance with the Paleontological Resources Protection Act 2009 based on Paleontological Resources Protection Act Sections 6302 and 6311. The information in the FEIS and ROD meet the requirements of the law.

Appeal Point: Appeal Issue 72. (Page 37 of appeal)

The Issue: The appellant claims violation of the Paleontological Resources Protection Act (PRPA). The PRPA of 2009 established new legal duties for construction projects – including those approved in this challenged ROD - to ensure preservation of paleontological resources on USFS and other federal land. The legal requirements established by this law are systematically overlooked in the ROD and supporting EIS. EIS Attachment F “Archaeological Rules and Restrictions for Berry Petroleum Oil and Gas Development on Ashley National Forest Lands” is not sufficient to meet the duties imposed by this Act

The Rule: In the Paleontological Resources Protection Act, there is Section 6302 MANAGEMENT, IN GENERAL.—The Secretary shall manage and protect paleontological resources on Federal land using scientific principles and expertise. The Secretary shall develop appropriate plans for inventory, monitoring, and the scientific and educational use of paleontological resources, in accordance with applicable agency laws, regulations, and policies. These plans shall emphasize interagency coordination and collaborative efforts where possible with non-Federal partners, the scientific community, and the general public. Also in Section 6304, COLLECTION OF PALEONTOLOGICAL RESOURCES--it is stated in item 3 (3) PREVIOUS PERMIT EXCEPTION.—Nothing in this section shall affect a valid permit issued prior to the date of enactment of this Act.

In SECTION 6311, SAVINGS PROVISIONS-- Nothing in this subtitle shall be construed to (1) invalidate, modify, or impose any additional restrictions or permitting requirements on any activities permitted at any time under the general mining laws, the mineral or geothermal leasing laws, laws providing for minerals materials disposal, or laws providing for the management or regulation of the activities authorized by the aforementioned laws including but not limited to the Federal Land Policy Management Act (43 U.S.C. 1701–1784), Public 24 Law 94–429 (commonly known as the “Mining in the Parks Act”) (16 U.S.C. 1901 et seq.), the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201–1358), and the Organic Administration Act (16 U.S.C. 478, 482, 551); (2) invalidate, modify, or impose any additional restrictions or permitting requirements on any activities permitted at any time under existing laws and authorities relating to reclamation and multiple uses of Federal land;
The Analysis: The leases (1997) were acquired prior to the law under a valid purchase of Federal Leases with stipulations in effect. The Forest Service has prepared plans for Paleontological Resources to conform to the law.

The District has prepared a form if an item or paleontological resources is discovered, provisions for a paleontologist to be on site during excavation. The FS has prepared contact sheet if during excavation a paleontological resources is found (See below).

The Analysis: Site-specific paleontological surveys will be required prior to the start of ground disturbing activities, for proposed development in geologic units (generally PFC Class 4 and 5) deemed likely to contain significant vertebrate fossils and/or noteworthy occurrences of invertebrate, plant, or trace fossils. If paleontological surveys show significant paleontological resources are known or likely to be present within a specified area, then paleontological monitoring of surface-disturbing activities within that area will be required.

The Forest Service has prepared a map of the Probable Fossil Yield Classification (PFYQ). This map outlines the classes.

The Conclusion: With Regard to the appellant's challenge, the Forest Service is in compliance with the Paleontological Resources Protection Act 2009 based on Paleontological Resources Protection Act Sections 6302 and 6311. The information in the FEIS and ROD meet the requirements of the law.

Appeal Point: Appeal Issue 73 (page 38 of appeal)

The Issue: The appellant asserts that the EIS fails to adequately consider the Paleontological Resources Protection Act (PRPA) direction for high ranking sites. The EIS fails to adequately consider this or outline such a plan, and the ROD fails to have required legal guarantees that such plan will be implemented. It also fails to include necessary commitments that a qualified paleontologist will be on site to observe actual construction activities.

The Rule: See above rule discussion in Appeal Issue 71.

The Analysis: The District has prepared a form if an item or paleontological resources are discovered, provisions for a paleontologist to be on site during excavation (See below). Site-specific paleontological surveys will be required prior to the start of ground disturbing activities, for proposed development in geologic units (generally PFC Class 4 and 5) deemed likely to contain significant vertebrate fossils and/or noteworthy occurrences of invertebrate, plant, or trace fossils. If paleontological surveys show significant paleontological resources are known or likely to be present within a specified area, then paleontological monitoring of surface-disturbing activities within that area will be required.

Where required for a given area, paleontological monitoring may involve concurrent observation of all construction activities within that area, or may consist of periodic spot-checking and salvage of observed fossil resources, as determined by the Forest Service on a case by case basis. The level of paleontological monitoring deemed necessary by the Forest Service for a given area will depend on the nature and abundance of fossil resources expected to be encountered within that area, and may change (either higher or lower) as construction and paleontological monitoring activities progress.

Any significant fossils identified during paleontological surveys or monitoring efforts would be collected by a qualified paleontologist, properly documented, and transferred to a Forest Service-approved paleontological repository for curation.

Paleontological monitors will have authority to temporarily divert operating equipment away from exposed fossils in order to professionally, safely, and efficiently recover the fossil specimens and collect associated data. Monitors would also have authority to temporarily stop construction activities in the vicinity of exposed fossil resources.

If significant paleontological resources are discovered at a site where or when a paleontological monitor is not present, construction activities would be halted and the Forest Service notified. Ground disturbing operations in the area of the discovery would not resume until authorization to proceed has been received from the Forest Service.

Probable Fossil Yield Classification - (PFYQ) is broken down into 5 classifications. The most important Class, Class 5 has vertebrate fossils and/or scientifically significant nonvertebrate fossils and it is documented to occur consistently, predictably, and/or abundantly. These classes are outlined on a map of likely to occur with a plan listed in the ROD. The Forest Service plan details how to deal with paleontological resources.

The Conclusion: With Regard to the appellant's challenge, the Forest Service is in compliance with the Paleontological Resources Protection Act 2009 based on Paleontological Resources Protection Act Sections 6302 and 6311. The information in the FEIS and ROD meet the requirements of the law.

Appeal Point: Appeal Issue 74. (Page 38 of appeal)

The Issue: The appellant claims that to meet the intent of the 2009 PRPA law, a revised or new Decision Document needs to be issued, which includes the following additional commitments.

- Write a written paleontological preservation plan site-specifically developed for this project by a trained paleontologist that specifies and maps all sites to be surveyed by a third party paleontologist before 'shovels hit the dirt,'
- legal commitment that a properly qualified/professional paleontologist must be physically present on-location to observe all ground-disturbing construction work and,
- that outlines minimum sideboards for how the cleaning, sorting, and on-site mapping and analysis will be done in a manner that is timely, efficient, and preserves all potentially relevant paleontological data before discovered resources are removed (presumably for study in a lab), allowing construction to continue.

Without changes, the EIS and ROD remain legally insufficient under the Paleontological Resource Preservation Act of 2009.

The Rule: See the rule discussion in Appeal Issue 71 and 72.

The Analysis: Item 1, the plan for documentation of found paleontological resources is brief, however detailed enough to sort, document and get the paleontological resources to the proper authorities. Item 2, The ROD documents that as follows:

Item 3, the Forest Service plan is not as detailed as specified, however the leases were obtained prior to the Paleontological Resources Protection Act.

The Conclusion: With Regard to the appellant's challenge, the Forest Service is in compliance with the Paleontological Resources Protection Act 2009 based on Paleontological Resources Protection Act Sections 6302 and 6311. Thus the information in the FEIS and ROD provides protection and documentation of the possible paleontological resources.